APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,814	07/10/2001	Lassi Hippelainen	975.348USW1	7875

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EXAMINER
GYORFI, THOMAS A

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/901,814	HIPPELAINEN, LASSI
	Examiner	Art Unit	
	Tom Gyorfi	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 July 2006</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-14,16,17,19-29 and 31-39* is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *2-14, 16, 17, 19-29, and 31-39* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some * c)☐ None of:
       1.☐ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

AU 2135

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 2-14, 16, 17, 19-29, and 31-39 remain for examination. The

correspondence filed 7/6/06 added claims 36-39.

Response to Arguments

2.   Applicant's arguments, see the amendment filed 7/6/06, with respect to the

rejection(s) of claim(s) 2-14, 16, 17, 19-29, and 31-35 under Dikmen in view of Bussey

have been fully considered and are persuasive. Therefore, the rejection has been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made

in view of Dikmen in view of Makansi (previously cited as pertinent prior art in the Office

Action of 3/20/06).

Claim Objections

3.   Claims 36-39 are objected to under 37 CFR 1.75 as being substantial duplicates

of claims 21, 31, 33, and 34 respectively. When two claims in an application are

duplicates or else are so close in content that they both cover the same thing, despite a

slight difference in wording, it is proper after allowing one claim to object to the other as

being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

5.   Claims 2-14, 16, 17, 19-29, and 31-39 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Dikmen et al. (U.S. Patent 6,577,865), and further in view of

Makansi et al. (U.S. Patent 6,771,597).

Referring to Claim 14:

Dikmen discloses an interception method for performing a lawful interception in a

packet network, comprising the steps of:

a) providing a first network element having an interception function for

intercepting data packets (col. 4, lines 35-55);

b) controlling said interception function by an interception control means

implemented in a second network element (col. 4, lines 10-25); and

c) transmitting an intercepted data packet from said first network element via said

packet network to an interception gateway element providing an interface to at least one

intercepting authority (col. 6, lines 10-35).

Dikmen does not explicitly disclose "wherein said first network element generates

fake packets to be transmitted with said intercepted data packets and the fake packets

are transmitted from said first network element to said interception gateway element,

wherein said fake packets are transmitted at random or triggered at any passing packet,

such that the total load of intercepted and fake packets transmitted to said interception
gateway element is constant."

Makansi discloses wherein said first network element generates fake packets to
be transmitted with said intercepted data packets and the fake packets are transmitted
from said first network element to said interception gateway element, wherein said fake
packets are transmitted at random or triggered at any passing packet (col. 7, lines 30-40
and 63-67). It would have been obvious to one of ordinary skill in the art at the time the
invention was made to create and transmit fake packets as part of the system disclosed
by Dikmen. The motivation for doing so would be to make it more difficult to intercept a
message via unauthorized access (Makansi, col. 2, lines 5-20).

Examiner takes Official Notice that it would be obvious to ensure that the total
load of intercepted and fake packets transmitted to said interception gateway element is
constant, as in the general case network elements function optimally when traffic is
constant (for reference, see the previously cited Bussey reference, col. 5, lines 50-65).

Referring to Claims 21 and 36:

Dikmen discloses an interception system for performing a lawful interception in a
packet network, comprising:

a) a first network element having an interception function for intercepting data
packets and comprising a transmitting means for transmitting an intercepted data
packet to said packet network (col. 4, lines 35-55);

b) an interception control means implemented in a second network element and controlling the interception function (col. 4, lines 10-25); and

c) an interception gateway element having a receiving means for receiving said intercepted data packet and an interface means for providing an interface to at least one intercepting authority (col. 6, lines 10-35).

Dikmen does not explicitly disclose "wherein said first network element further comprises a means for generating fake packets to be transmitted with said intercepted data packets, wherein said fake packets are transmitted at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to said interception gateway element is constant."

Makansi discloses wherein said first network element further comprises a means for generating fake packets to be transmitted with said intercepted data packets, wherein said fake packets are transmitted at random or triggered at any passing packet (col. 7, lines 30-40 and 63-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to create and transmit fake packets as part of the system disclosed by Dikmen. The motivation for doing so would be to make it more difficult to intercept a message via unauthorized access (Makansi, col. 2, lines 5-20).

Examiner takes Official Notice that it would be obvious to ensure that the total load of intercepted and fake packets transmitted to said interception gateway element is constant, as in the general case network elements function optimally when traffic is constant (for reference, see the previously cited Bussey reference, col. 5, lines 50-65).

Referring to Claims 31 and 37:

Dikmen discloses an interception system for performing a lawful interception in a

packet network, comprising:

a) a first network element having an interception function for intercepting data

packets and comprising a transmitting means for transmitting an intercepted data

packet to said packet network (col. 4, lines 35-55);

b) an interception control means implemented in a second network element and

controlling the interception function (col. 4, lines 10-25); and

c) an interception gateway element having a receiving means for receiving said

intercepted data packet and an interface means for providing an interface to at least one

intercepting authority (col. 6, lines 10-35), wherein said interception gateway element

comprises a memory means for storing received intercepted data packets before

supplying them to said interface means (col. 4, lines 50-60), an extraction means for

extracting intercepted data packets [from fake data packets] (col. 2, lines 20-30), and a

means for adding time information to said received intercepted data packets before

storing them in memory (col. 5, lines 1-2, and 55-65).

Dikmen does not explicitly disclose the use of fake packets in the system, nor a

decryption means for removing an encryption of the received data packets. However,

Makansi discloses these limitations (col. 7, lines 30-40 and 63-67; col. 4, lines 40-50). It

would have been obvious to one of ordinary skill in the art at the time the invention was

made to create and transmit fake packets as part of the system disclosed by Dikmen.

The motivation for doing so would be to make it more difficult to intercept a message via unauthorized access (Makansi, col. 2, lines 5-20).

Examiner takes Official Notice that it would be obvious to ensure that the total load of intercepted and fake packets transmitted to said interception gateway element is constant, as in the general case network elements function optimally when traffic is constant (for reference, see the previously cited Bussey reference, col. 5, lines 50-65).

Referring to Claims 33 and 38:

Dikmen discloses a network element for a packet network, comprising:

a) an interception means for intercepting a data packet received from said packet network (col. 4, lines 10-25), and

b) a transmitting means for transmitting said intercepted data packet via said packet network to an interception gateway element (col. 6, lines 10-35),

c) wherein said interception means is controlled by an interception control means arranged in another network element (col. 4, lines 35-50).

Dikmen does not disclose "said network element further comprises a means for generating fake packets to be transmitted with said intercepted data packets and the fake packets are transmitted from said network element to said interception gateway element, and wherein said transmitting means transmits said fake packets at random or triggered at any passing packet, such that the total load of intercepted and fake packets transmitted to said interception gateway element is constant."

Makansi discloses said network element further comprises a means for generating fake packets to be transmitted with said intercepted data packets and the fake packets are transmitted from said network element to said interception gateway element, and wherein said transmitting means transmits said fake packets at random or triggered at any passing packet (col. 2, lines 30-40 and 63-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to create and transmit fake packets as part of the system disclosed by Dikmen. The motivation for doing so would be to make it more difficult to intercept a message via unauthorized access (Makansi, col. 2, lines 5-20).

Examiner takes Official Notice that it would be obvious to ensure that the total load of intercepted and fake packets transmitted to said interception gateway element is constant, as in the general case network elements function optimally when traffic is constant (for reference, see the previously cited Bussey reference, col. 5, lines 50-65).

Referring to Claims 34 and 39:

Dikmen discloses an interception gateway element for an interception system of a packet network, comprising:

a) a receiving means for receiving an intercepted data packet via said packet network from a network element having an interception function (col. 4, lines 25-65); and

b) an interface means for providing an interface to an intercepting authority (col. 6, lines 10-35); and

c) a memory means for storing received intercepted data packets before supplying them to said interface means (col. 4, lines 50-60), an extraction means for extracting intercepted data packets [from fake data packets] (col. 2, lines 20-30), and means for adding a time information to said received intercepted data packets before storing them in memory (col. 5, lines 1-2, 55-65).

Dikmen does not explicitly disclose the use of fake packets in the system, nor a decryption means for removing the encryption of the received intercepted data packets. However, Makansi discloses these limitations (col. 7, lines 30-40 and 63-67; col. 4, lines 40-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to create and transmit fake packets as part of the system disclosed by Dikmen. The motivation for doing so would be to make it more difficult to intercept a message via unauthorized access (Makansi, col. 2, lines 5-20).

Examiner takes Official Notice that it would be obvious to ensure that the total load of intercepted and fake packets transmitted to said interception gateway element is constant, as in the general case network elements function optimally when traffic is constant (for reference, see the previously cited Bussey reference, col. 5, lines 50-65).

Referring to Claims 2 and 19:

Dikmen and Makansi disclose the limitations of Claims 14 and 21 above. Dikmen further discloses said interception gateway element is integrated in said second network element (Fig. 3; col. 5, lines 35-50).

Referring to Claims 3 and 22:

Dikmen and Makansi disclose the limitations of Claims 14 and 21 above. Dikmen further discloses a header of a data packet is read by said second network element & data packets to be intercepted are duplicated (col. 4, line 45-col. 5, line 15).

Referring to Claim 4:   •

Dikmen and Makansi disclose the limitations of Claim 14 above. Makansi further discloses wherein said intercepted data packet is transmitted to said interception gateway element using a secure tunnel (col. 4, lines 20-40; col. 5, lines 65-67).

Referring to Claim 5:

Dikmen and Makansi disclose the limitations of Claim 4 above. Makansi further discloses said secure tunnel is implemented by an encryption processing (Ibid).

Referring to Claim 6:

Dikmen and Makansi disclose the limitations of Claim 14 above. Makansi further discloses wherein said intercepted data packet is transmitted via interworking units and encrypted between said interworking units, when said first network element and said interception gateway element are arranged in separate network segments (col. 4, lines 20-40; col. 6, lines 25-50, and Figure 5).

Referring to Claims 7 and 28:

Dikmen and Makansi disclose the limitations of Claims 14 and 21 above.

Dikmen further discloses said first network element is provided in each network

segment of said packet network (col. 4, lines 35-65).

Referring to Claim 8:

Dikmen and Makansi disclose the limitations of Claim 14 above. Dikmen further

discloses received intercepted data packets are collected in said interception gateway

element and supplied to an interface of said at least one intercepting authority (col. 5,

lines 5-35).

Referring to Claim 9:

Dikmen and Makansi disclose the limitations of Claim 8 above. Dikmen further

discloses said interface comprises a first interface for administrative tasks, a second

interface for network signaling, and a third interface for intercepted user data (col. 1,

lines 50-65; col. 4, lines 10-45).

Referring to Claim 10:

Dikmen and Makansi disclose the limitations of Claim 14 above. Dikmen further

discloses said intercepting function comprises a packet sniffing and filtering function

(col. 7, lines 20-30).

Referring to Claim 11:

Dikmen and Makansi disclose the limitations of Claim 10 above. Dikmen further

discloses said intercepting function is implemented in Gn interface (col. 7, lines 10-35).

Referring to Claim 12:

Dikmen and Makansi disclose the limitations of Claim 14 above. Dikmen further

discloses said interception function comprises reading data packets, analyzing the

header of the data packets as to whether the data packet should be intercepted or not,

and transmitting the data packet to said interception gateway element, and a

management function for interception and transmission criteria (col. 4, line 40 – col. 5,

line 15).

Referring to Claim 13:

Dikmen and Makansi disclose the limitations of Claim 14 above. Dikmen further

discloses an alarm is transmitted to said interception gateway element and all

interception information of a respective network element is deleted, when a breakage of

a casing of the respective network element has been detected (col. 3, lines 40-50).

Referring to Claims 16 and 23:

Dikmen and Makansi disclose the limitations of Claims 14 and 22 above.

Dikmen further discloses said intercepted data packet is padded to a maximum length

(col. 5, lines 1-2).

Referring to Claim 17:

Dikmen and Makansi disclose the limitations of Claim 14 above. Dikmen further discloses time information added to said intercepted data packet (col. 5, lines 55-65).

Referring to Claim 20:

Dikmen and Makansi disclose the limitations of Claim 21 above. Makansi further discloses wherein said first network element further comprises an encrypting means for encrypting said intercepted data packet (col. 4, lines 20-40).

Referring to Claim 24:

Dikmen and Makansi disclose the limitations of Claim 21 above. Dikmen further discloses said first network element is a gateway element of said packet network (col. 4, lines 35-55).

Referring to Claim 25:

Dikmen and Makansi disclose the limitations of Claim 21 above. Dikmen further discloses said first network element is a BG, an SGSN or a GGSN (col. 4, lines 35-50).

Referring to Claim 26:

Dikmen and Makansi disclose the limitations of Claim 24 above. Dikmen further discloses wherein an interception information defining a data packet to be intercepted is

included in a context information supplied to said first network element and used for
routing data packets (col. 4, lines 40-col. 5, line 15).

Referring to Claim 27:

Dikmen and Makansi disclose the limitations of Claim 26 above. Dikmen further
discloses wherein said interception control means comprises a storing means for storing
an interception list, and wherein said interception control means is arranged to add said
interception information to said context information supplied to said first network
element (col. 4, lines 25-60).

Referring to Claim 29:

Dikmen and Makansi disclose the limitations of Claim 21 above. Makansi further
discloses first network element comprises a control means for controlling interception
and encryption processing in accordance with an interception setting instruction
received from said interception control means (col. 4, lines 20-40).

Referring to Claim 32:

Dikmen and Makansi disclose the limitations of Claim 21 above. Dikmen further
discloses said first network element comprises a detecting means for detecting a
malfunction and/or breakage thereof, and signaling means for signaling an alarm to said
interception gateway element in response to an output of said detecting means (col. 3,
lines 40-50; col. 5, lines 55-65).

Referring to Claim 35:

Dikmen and Makansi disclose the limitations of Claim 34 above. Dikmen further discloses an interception control means for controlling said interception function of said network element (col. 4, lines 10-45).

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Gyorfi whose telephone number is (571) 272-3849. The examiner can normally be reached on 8:30am - 5:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG - 8/4/06